

C L A I M S

1. A catalytic apparatus for exhaust purification that is provided in an exhaust path of an internal-combustion engine operable with at least a theoretical
5 air-fuel ratio and a lean air-fuel ratio, comprising:

a three-way catalyst having an inner layer thereof containing at least rhodium as a noble metal and a surface layer thereof containing platinum or palladium as a noble metal.

10 2. A catalytic apparatus for exhaust purification according to claim 1, wherein said exhaust path is provided with exhaust purification means adapted to absorb NOx when an air-fuel ratio of incoming exhaust gas is a lean air-fuel ratio and to release or reduce
15 the absorbed NOx when an oxygen concentration of the incoming exhaust gas lowers, and said three-way catalyst is located on an upper-stream side of said exhaust purification means.

3. A catalytic apparatus for exhaust purification
20 according to claim 1 or 2, wherein the noble metal in said inner layer of said three-way catalyst mainly consists of rhodium alone or both rhodium and platinum.

4. A catalytic apparatus for exhaust purification according to any one of claims 1 to 3, wherein the
25 noble metal in said surface layer of said three-way catalyst mainly consists of platinum or palladium.

5. A catalytic apparatus for exhaust purification according to claim 2, wherein said three-way catalyst is loaded with a very small quantity of or no ceria.

30 6. A catalytic apparatus for exhaust purification according to claim 3, wherein the noble metal in said inner layer mainly contains rhodium alone, and a rhodium content of said inner layer is set within a

range from 0.05 to 5.0 g/l of catalyst volume.

7. A catalytic apparatus for exhaust purification according to claim 3, wherein the noble metal in said inner layer mainly contains rhodium alone, and the
5 rhodium content of said inner layer is set within the range from 0.3 to 0.6 g/l of catalyst volume.

8. A catalytic apparatus for exhaust purification according to claim 4, wherein the noble metal in said inner layer mainly contains rhodium alone, and a
10 rhodium content of said inner layer is set within a range from 0.05 to 5.0 g/l of catalyst volume.

9. A catalytic apparatus for exhaust purification according to claim 4, wherein the noble metal in said inner layer mainly contains rhodium alone, and a
15 rhodium content of said inner layer is set within a range from 0.3 to 0.6 g/l of catalyst volume.

10. A catalytic apparatus for exhaust purification according to claim 4, wherein the noble metal in said surface layer mainly contains platinum,
20 and a platinum content of said surface layer is set within a range from 0.05 to 20.0 g/l of catalyst volume.

11. A catalytic apparatus for exhaust purification according to claim 4, wherein the noble metal in said surface layer mainly contains platinum,
25 and a platinum content of said surface layer is set within a range from 1.5 to 3.0 g/l of catalyst volume.